

Response

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

Page 2 of 16

Remarks

The Office Action mailed 23 January 2008 has been received and reviewed. No claims have been amended, cancelled, or added. Therefore, the pending claims are claims 1-8, 10-18, 20-31, and 33-39. However, claims 10-12, 20-27, 33-35, and 37-39 have been withdrawn from consideration in view of a species restriction. As such, the remarks provided herein are with respect to claims 1-8, 13-18, 28-31, and 36. In the Office Action Summary provided by the Examiner, claim 32 is also listed as pending. However, claim 32 was previously cancelled. Reconsideration and withdrawal of the rejections are respectfully requested in view of the remarks provided herein.

Conclusion of Various Matters and Definition of Remaining Issues

Various issues have been addressed in the previous office actions and responses thereto; with many of them being concluded. It is Applicant's desire to define the remaining issues and move forward with a response based thereon. As such, it appears to Applicant that the following rejections are the only rejections and/or objections currently being made by the Examiner and for which a response is required by Applicant:

- Rejection of claims 1-4, 6-8, 13-15, and 17-18 as being unpatentable under 35 U.S.C. §103(a) over the combined teachings of Bardenheier (U.S. Patent 4,782,888), and any one of Brubaker (U.S. Patent 622,113), JP 2002-30717, or the admitted prior art GFX heat exchanger having a wraparound tube with a flattened side wall satisfying all of the limitations of original claim 9.
- Rejection of claims 5, 16, 28-31 and 36 as being unpatentable under 35 U.S.C. §103(a) over the prior art (Bardenheier/Brubaker/JP '717/GFX) as applied to claims 4 and 15, and further in view of FR 2381869 and Sherman.
- Rejection of claims 1-4, 6-8, 13-15, and 17-18 as being unpatentable under 35 U.S.C. §103(a) over the combined teachings of Theil (DE 2930484) and Brubaker and optionally Bardenheier (U.S. Patent 4,782,888) as a teaching reference.

Response

Page 3 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

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For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

- Rejection of claims 5, 16, 28-31 and 36 as being unpatentable under 35 U.S.C. §103(a) over the prior art (Theil/Brubaker/Bardenheier), as applied to claims 4 and 15, and further in view of FR 2381869 and Sherman.

The Above-Noted 35 U.S.C. §103 Rejections

As noted above, the Examiner has made several rejections under 35 U.S.C. 103(a).

The Examiner has rejected claims 1-4, 6-8, 13-15, and 17-18 as being unpatentable under 35 U.S.C. §103(a) over the combined teachings of Bardenheier (U.S. Patent 4,782,888), and any one of Brubaker (U.S. Patent 622,113), JP 2002-30717, or the admitted prior art GFX heat exchanger having a wraparound tube with a flattened side wall satisfying all of the limitations of original claim 9. Applicant respectfully traverses the Examiner's rejection.

Further, the Examiner has rejected claims 5, 16, 28-31 and 36 as being unpatentable under 35 U.S.C. §103(a) over the prior art (Bardenheier/Brubaker/JP '717/GFX) as applied to claims 4 and 15, and further in view of FR 2381869 and Sherman. Applicant respectfully traverses the Examiner's rejection.

Further, the Examiner has rejected claims 1-4, 6-8, 13-15, and 17-18 as being unpatentable under 35 U.S.C. §103(a) over the combined teachings of Theil (DE 2930484) and Brubaker and optionally Bardenheier (U.S. Patent 4,782,888) as a teaching reference. Applicant respectfully traverses the Examiner's rejection.

Lastly, the Examiner has rejected claims 5, 16, 28-31 and 36 as being unpatentable under 35 U.S.C. §103(a) over the prior art (Theil/Brubaker/Bardenheier), as applied to claims 4 and 15, and further in view of FR 2381869 and Sherman. Applicant respectfully traverses the Examiner's rejection.

Response

Page 4 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAMERejection of claims 1, 14 and 28Removal of JP '717 Reference

First, Applicant respectfully traverses the Examiner's rejections and any allegations with respect to such references cited and applied to the present invention, as well as allegations with respect to any of the declarations provided in the above-identified matter. Applicant has previously provided a "DECLARATION (REVISED) OF PRIOR INVENTION TO OVERCOME CITED PATENT UNDER 37 C.F.R. §1.131." It is now acknowledged that the Examiner considers the evidence sufficient for establishing conception of the present invention prior to the effective date of the JP 2002-30717 reference (i.e., the publication date of 31 January 2002) and it is submitted by the Applicant that there was due diligence from prior to the effective reference date (i.e., the publication date of 31 January 2002) to the filing date (i.e., 27 November 2002) of the provisional application Serial No. 60/429,160 (e.g., constructive reduction to practice) to which the present application claims priority.

As such, it continues to be maintained that the JP 2002-30717 reference is removed as a reference against the rejected claims. As all of the independent claims 1, 14, and 28 have been rejected using the JP 2002-30717 reference, such claims are not obvious in view of combinations of cited references that include JP 2002-30717. It is respectfully requested that such rejections be withdrawn.

With respect to the removal of the JP 2002-30717 reference as against the rejected claims, the following must be considered:

Examiner acknowledges conception prior to the critical date

The Examiner has acknowledged conception of the invention before the effective date of the JP 2002-30717 reference (i.e., 31 January 2002).

Lack of diligence as to the invention

The Examiner continues to maintain that the Exhibits B-1 through B-9 do not show diligence for the approximate year period from alleged conception in December 2001 until late November 2002. Applicants respectfully traverse this finding of a lack of diligence by the

Response

Page 5 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

Examiner and specifically the comments made by the Examiner. It is submitted that Applicants previous remarks concerning diligence are sufficient to establish diligence. Many of such remarks are provided below along with additional remarks. Applicant has provided in the form of a Declaration evidence that shows all the activities carried out by Applicant during this period of time (e.g., when Applicant had numerous other business matters with which to deal). For the Examiner to allege that it is "*fiction* to state that all of those activities related directly to reducing his invention to practice (either actual reduction or constructive reduction)" (*emphasis added*) (see page 5 of Office Action) is clearly inappropriate. Applicant has set forth such activities and declared that such activities related directly to reducing his invention to practice. The Examiner is, without any evidence, questioning the veracity of the Declaration provided in the case.

Further, the Examiner states that "nine [sic] months of inactivity as to the claimed invention is simply too long to qualify as diligence" (see page 6 of Office Action). However, the Declaration shows such activity during the necessary period and it is inappropriate for the Examiner to ignore such activity.

As recited in MPEP 715.07(a), "applicant must show evidence of facts establishing diligence." As set forth in MPEP 2138.06 Section, "[t]he work relied upon to show reasonable diligence must be directly related to the reduction to practice of the invention in issue. . . . See also Scott v. Koyama, 281 F.3d 1243, 1248-49, 61 USPQ2d 1856, 1859 (Fed. Cir. 2002) (Activities directed at building a plant to practice the claimed process of producing tetrafluoroethane on a large scale constituted efforts toward actual reduction to practice, and thus were evidence of diligence. . .)." It is further noted that an inventor does not need to drop all other work and concentrate on a particular invention (see Bey et al. v. Kollonnitsch et al., 806 F.2d 1024, 231 USPQ (BNA) 967 (Fed. Cir. 1986)).

The language of the declaration by Mr. Janssen clearly describes the diligence by Mr. Janssen to reduce the claimed invention to practice. The Exhibits B-1 through B-9 are evidence supporting the diligence asserted by the Applicant. Such evidence of diligence must be considered in its entirety along with the language supporting diligence presented in the

Response

Page 6 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

Declaration by Mr. Janssen. As shown, just as in Scott v. Koyama, Mr. Janssen engaged in all sorts of activities directed at installing the system (i.e., reducing the claimed invention to practice).

One cannot just bypass all the regulatory and site restrictions and proceed in installing a system as claimed without permission and approval by regulatory authorities. It takes time and effort to obtain such permissions and approvals. Thus, diligence must be considered in light of the circumstances surrounding the installation of a heat exchanger into a water main that carries water from a potable water source.

For example, as discussed in the Declaration by Mr. Janssen, from June, 2002 to November 27, 2002, Applicant had meetings and telephone conversations with officials from the Department of Health regarding approval of the use of a heat exchanger on a municipal water main. Such preparatory work preceded the receipt of approval to install the heat exchanger (see B-8 thru B-9). Without approval, installation could not have occurred. As such, this preparatory work was necessary to such installation and clearly evidence of diligence in reducing the invention to practice. The same applies to obtaining permission from a site at which the system is to be installed. Much preparatory time and effort goes into obtaining such permission.

Further, and as clearly shown in the Exhibits and described by Mr. Janssen in the declaration, a manufacturer for the heat exchanger and other parts of the system needed to be found (see Exhibit B-1 and B-11), a site had to be found at which to install the system (see Exhibits B-2 through B-5, and also B-6 and B-7) (not an easy task to get permission), and approval from regulatory agencies needed to be obtained (see Exhibits B-8 and B-9). All of the Exhibits evidence the diligence in attempting to reduce the claimed invention to practice. Per the Declaration, the relationship of the claimed invention to the evidentiary documents is clearly provided (e.g., Exhibits B-2 through B-5, and also B-6 and B-7, evidence the activities related to finding a site to implement the system).

As such, contrary to the Examiner's assertion that nothing in the acts of diligence described in the declaration appear directly related to the invention claimed, each of such

Response

Page 7 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

Exhibits show activities directed at installing a system as claimed. In view thereof, diligence from the conception of the invention prior to the effective date of the JP 2002 30717 reference to late November 2002 has been established.

In view of the above discussion, it is respectfully submitted that the Declaration of Prior Invention made by Mr. Janssen overcomes the JP 2002 30717 reference and as such this reference cannot be used as a reference against the patentability of the claimed invention.

Secondly, however, even if the Examiner inappropriately continues to maintain that the Declaration submitted does not render the JP 2002-30717 reference removed as against the rejected claims, the present invention is not obvious over the combination of references for at least the following reasons, including the lack of a reasonable expectation of success, and further by reason of secondary considerations as described herein.

Non-obviousness of Claims 1, 14, and 28

As indicated in MPEP 2141 with respect to non-obviousness: "The Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy. . .

This is not to say, however, that there will not be difficulties in applying the nonobviousness test. What is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context. The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to a case-by-case development. We believe that strict observance of the requirements laid down here will result in that uniformity and definitiveness which Congress called for in the 1952 Act.

Response

Page 8 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

... Office policy is to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. 103. As quoted above, the four factual inquires enunciated therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations.

... Objective evidence or secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts are relevant to the issue of obviousness and must be considered in every case in which they are present. When evidence of any of these secondary considerations is submitted, the examiner must evaluate the evidence. The weight to be accorded to the evidence depends on the individual factual circumstances of each case. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987). The ultimate determination on patentability is made on the entire record. *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)."

Still further, as recited in MPEP 716.06:

Another form of secondary evidence which may be presented by applicants during prosecution of an application, but which is more often presented during litigation, is evidence that competitors in the marketplace are copying the invention instead of using the prior art. However, more than the mere fact of copying is necessary to make that action significant because copying may be attributable to other factors such as a lack of concern for patent property or contempt for the patentees ability to enforce the patent. *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 226 USPQ 881 (Fed. Cir. 1985). Evidence of copying was persuasive of nonobviousness when an alleged infringer tried for a substantial length of time to design a product or process similar to the claimed invention, but failed and then copied the claimed invention instead. *Dow Chem. Co. v. American Cyanamid Co.*, 837 F.2d 469, 2 USPQ2d 1350 (Fed. Cir. 1987). Alleged copying is not persuasive of nonobviousness when the copy is not identical to the claimed product, and the other manufacturer had not expended great effort to develop its own

Response

Page 9 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

solution. *Pentec, Inc. v. Graphic Controls Corp.*, 776 F.2d 309, 227 USPQ 766 (Fed. Cir. 1985). See also *Vandenberg v. Dairy Equipment Co.*, 740 F.2d 1560, 1568, 224 USPQ 195, 199 (Fed. Cir. 1984) (evidence of copying not found persuasive of nonobviousness) and *Panduit Corp. v. Dennison Manufacturing Co.*, 774 F.2d 1082, 1098-99, 227 USPQ 337, 348, 349 (Fed. Cir. 1985), vacated on other grounds, 475 U.S. 809, 229 USPQ 478 (1986), on remand, 810 F.2d 1561, 1 USPQ2d 1593 (Fed. Cir. 1987) (evidence of copying found persuasive of nonobviousness where admitted infringer failed to satisfactorily produce a solution after 10 years of effort and expense).

Yet further, as indicated in MPEP 2143.02 entitled "Reasonable Expectation of Success Is Required," "[a] rationale to support a conclusion that a claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395 (2007); *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950)." However, as noted in 2143.02 (I), there must be a reasonable expectation of success.

Lack of Reasonable Expectation of Success

Contrary to the Examiner's position, there is no reasonable expectation of success in the combination of the cited references in each of the Examiner's rejections. For example, JP 2002-30717 describes a heat exchanger that is used with a waste pipe. Bardenheier does not even describe any construction of a heat exchanger, although it does indicate that the nondescript heat exchanger can be used with a municipal water main. Thiel appears to describe the use of a heat exchanger with a supply line and the prior art GFX heat exchanger has a wrap around tube with a flattened side wall.

Response

Page 10 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

However, none of the references alone show a fluid source conduit configured to replace a section of existing conduit that is in a flooded state with a heat transfer pipe wrapped around a portion thereof as described in the pending claims. The Examiner alleges that it would be obvious to one skilled in the art to use one or more of the wrap around heat exchangers in a configuration like that described in, for example, Bardenheier.

However, what is obvious is that no one, until the invention and disclosure thereof (e.g., confidential and/or non-confidential) by Applicant, recognized that use of a heat exchanger, like the GFX heat exchanger configured to replace a section of an existing conduit that is in a flooded state, would be successful in accomplishing sufficient heat transfer to make a system such as that described in claim 1 effective.

There was no reasonable expectation of success in substituting a heat exchanger that functions in a waste environment into a flooded state situation until recognized by Applicant. For example, Bardenheier recognizes that "utilities that deliver domestic water have large quantities of liquid with excellent low grade thermal energy exchange potential" (column 1, lines 43-45) and that a "reason for not tapping this potential is the significant risk of hazard to the public health and safety by uncontrolled access to a domestic water supply" (column 1, lines 47-48).

However, Bardenheier fails to find, define, or describe any heat exchanger that would solve the problem and/or operate in a water main with a reasonable expectation of success. Not until Applicant's invention and disclosure thereof has anyone described a system (i.e., including a heat pump) using a suitable heat exchanger as described in the pending claims that would provide successful heat exchange in a flooded state situation.

The Examiner further cites Brubaker as recognizing what was not taught by the other cited references. For example, the Examiner states on page 7 of the Office Action, that

"... the assertion that only applicant could have ascertained that a helical coil heat exchanger wrapped around a pipe could transfer heat to or from a municipal water main is

Response

Page 11 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

contradicted by Brubaker (USP 622,113) who recognized that over 100 years ago. The argument is contradicted by fact and is therefore unpersuasive. Moreover the notion that there is some kind of unexpected or unpredictable result associated with using a helical coil wrapped around a pipe as a heat exchanger is without any factual support. This construction is extremely well known and applicant has presented no evidence (test results etc) to show that there [is] anything unpredictable about it. It has been known for over 100 years in this art as evidenced by Brubaker."

However, Applicant is not asserting that a coil wrapped around a pipe is new or can function to transfer heat. Rather, Applicant asserts that not until Applicant's invention and disclosure thereof has anyone described a system (i.e., including a heat pump) using a suitable heat exchanger as described in the pending claims that would provide successful heat exchange in a flooded state situation. Further, Applicant asserts that Bardenheier fails to find, define, or describe any heat exchanger that would solve the problem and/or operate in a water main with a reasonable expectation of success.

The citation of Brubaker by the Examiner further strengthens Applicant's argument that not until Applicant's invention and disclosure thereof has anyone described a system (i.e., including a heat pump) using a suitable heat exchanger as described in the pending claims that would provide successful heat exchange in a flooded state situation. Brubaker was known for over 100 years as noted by the Examiner. However, nobody over that 100 years has ever incorporated the apparatus of Brubaker or a device like it into a system including a heat pump as described in the pending claims. One may ask "Why?" The reason is clear. Such a combination was not obvious to anybody until Applicant's invention and disclosure thereof.

Since nobody over the last 100 years incorporated Brubaker or any device like it into a system including a heat pump as described in the pending claims, clearly one cannot say that the results of such a system were predictable or expected. Otherwise, such a system would have long been used or described. Not until Applicant's invention and disclosure thereof has anyone described a system (i.e., including a heat pump) using a suitable heat exchanger as described in the pending claims that would provide successful heat exchange in a flooded state situation.

Response

Page 12 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

This is clearly evidenced by the copying of Applicant's invention by the maker of the GFX heat exchanger (i.e., that has been described as early as at least October of 1986 in the GFX Patent No. 4,619,311 and which was used in a waste water gravity type application) as described herein. Just like with Brubaker, the GFX heat exchanger was available since at least October of 1986 (more than 10 years before the filing of the present application). However, during that time, nobody incorporated the GFX heat exchanger into a system including a heat pump as described in the pending claims. Again, one may ask "Why?" The reason is clear. Such a combination was not obvious to anybody until Applicant's invention and disclosure thereof.

Copying by One Skilled in the Art

As indicated above, copying is a form of secondary evidence which may be presented by applicant during prosecution of an application that must be considered by the Examiner (e.g., evidence that competitors in the marketplace are copying the invention instead of using the prior art). In the present case, copying has occurred by those skilled in the art (hereinafter referred to as "GFX") only after learning of Applicant's invention. Evidence of such copying is presented in a Declaration by Mr. Janssen attached hereto as Attachment B.

As shown by Declaration, only after learning of the Applicant's invention, did GFX update its website to include an embodiment wherein a GFX type heat exchanger was inserted into a city water main to extract thermal energy therefrom. However, also as indicated above, "more than the mere fact of copying is necessary to make that action significant because copying may be attributable to other factors such as a lack of concern for patent property or contempt for the patentees ability to enforce the patent. *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 226 USPQ 881 (Fed. Cir. 1985). Evidence of copying was persuasive of nonobviousness when an alleged infringer tried for a substantial length of time to design a product or process similar to the claimed invention, but failed and then copied the claimed

Response

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

Page 13 of 16

invention instead. *Dow Chem. Co. v. American Cyanamid Co.*, 837 F.2d 469, 2 USPQ2d 1350 (Fed. Cir. 1987)."

In the present case, GFX obtained a patent on a GFX heat exchanger for use in waste water applications in 1986 as evidenced by the Exhibit A-3 of the Declaration (Revised) of Prior Invention to Overcome Cited Patent Under 37 CFR 1.131 by Mr. Janssen. For years, as mentioned in the Declaration attached hereto by Mr. Janssen, the only heat exchanger used and/or tested in city water mains were heat exchangers that removed water from the water main, processed or otherwise manipulated that water, and then returned the water to the main. Not until the invention by the Applicant (i.e., well over 10 years after the GFX Patent No. 4,619,311 issued in 1986), and disclosure of same to personnel associated with the GFX patent, did GFX design a system where a GFX type heat exchanger is used in a city water main. Other designs were known as mentioned above that could have been used. However, instead, GFX copied the claimed invention.

Such a substantial length of time in failing to recognize use of its own GFX technology for use with conduits that are in a flooded state (e.g., city water main) is clearly an indication of the nonobviousness of the claimed invention. Further, the failure to recognize such use for a substantially long period of time (e.g., prior to 1986) by those associated with GFX who are clearly skilled in the art is also clearly an indication of the nonobviousness of the claimed invention. See *Panduit Corp. v. Dennison Manufacturing Co.*, 774 F.2d 1082, 1098-99, 227 USPQ 337, 348, 349 (Fed. Cir. 1985), vacated on other grounds, 475 U.S. 809, 229 USPQ 478 (1986), on remand, 810 F.2d 1561, 1 USPQ2d 1593 (Fed. Cir. 1987) (evidence of copying found persuasive of nonobviousness where admitted infringer failed to satisfactorily produce a solution after 10 years of effort and expense).

Still further, as set forth in the Declaration by Mr. Janssen attached hereto, the copying of the claimed invention occurred very soon after Mr. Janssen provided GFX with the information concerning the present invention. This also is indicia of non-obviousness (see Asahi/America

Response

Page 14 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

Inc. v. MFRI Inc., 36 F. Supp. 2d 618,622, 51 USPQ2d 1154 (S.D. N.Y. 1999) ("the Court's conclusion as to the non-obviousness of plaintiff's invention is corroborated . . . by the fact that it was copied by defendants as soon as they were presented with it.").

The Examiner continues to indicate that there is "no evidence" of copying. The Examiner totally ignores the fact that GFX (i.e., someone in the industry and clearly one skilled in the art) was provided with information regarding Applicant's claimed system and soon thereafter, as presented in a Declaration by Mr. Janssen previously provided as Attachment B, copied the design. As such, the Applicant respectfully traverses the Examiner's comments on copying.

The Examiner continues to dwell on the use of a confidentiality agreement. However, Applicant continues to assert that whether a confidentiality agreement existed or not is **irrelevant** to the showing of secondary evidence which may be presented by Applicant during prosecution of the application that must be considered by the Examiner. In the present case, copying has occurred by those skilled in the art (hereinafter referred to as "GFX") only after learning of Applicant's invention and clearly many, many years after GFX technology was available. The only thing that existence of a confidentiality agreement would show is whether GFX also violated or breached provisions of such an agreement; which is irrelevant to the provision of secondary evidence of copying.

Further, even if the idea copied presented a new opportunity to expand the market for heat exchanger product, it was still copied whether or not a confidentiality agreement existed.

Yet further, the Examiner continues to set forth requirements for what constitutes "copying" that are clearly not required to provide evidence of secondary considerations. For example, the Examiner performs an analysis concerning copying based on whether the Applicant could prove infringement (e.g., even addressing contributory infringement) on the part of GFX. Infringement analysis is not proper and not relevant to the issue of copying. Further, infringement and patentability are two very separate questions and any infringement analysis should be given absolutely no weight on whether the present claims are patentable. As indicated

Response

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME

Page 15 of 16

herein, the weight to be accorded evidence of secondary considerations depends on the individual factual circumstances of each case and depends on the entire record.

The entire record provides evidence of copying. As indicated above, copying is a form of secondary evidence which may be presented by applicant during prosecution of an application that must be considered by the Examiner. In the present case, copying has occurred by those skilled in the art (e.g., GFX) and very soon after learning of the claimed invention (e.g., from Applicant). This presents strong evidence of secondary considerations, contrary to the Examiner's assertion that only a "weak showing of secondary considerations" was presented. With such a strong showing of secondary considerations, the present invention is clearly not obvious in view of the cited references.

For at least the above reasons, original claims 1, 14, and 28 are not obvious in view of the cited references.

Rejection of claims 2-8, 13, 15-18, 29-31, and 36

Yet further, claims 2-8, 13, 15-18, 29-31, and 36 respectively depend on one of the independent claims, either directly or indirectly. Therefore, they include the limitations of the respective independent claim upon which they depend. The other references cited in the rejection of such dependent claims do not cure the deficiencies of the primary references cited against the independent claims. As such, these claims are also not obvious over the references cited for the same reasons as provided above. However, further, the citation of such numerous references to make obvious one or more of such dependent claims of the present invention is clearly hindsight reconstruction of Applicant's invention.

Response

Page 16 of 16

Serial No.: 10/721,698

Confirmation No.: 6282

Filed: November 25, 2003

For: HEAT EXCHANGE APPARATUS, SYSTEM AND METHODS REGARDING SAME**Summary**

It is respectfully submitted that the pending claims are in condition for allowance and notification to that effect is respectfully requested. The Examiner is invited to contact Applicant's Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted

By

Mueting, Raasch & Gebhardt, P.A.

P.O. Box 581415

Minneapolis, MN 55458-1415

Phone: (612) 305-1220

Facsimile: (612) 305-1228

Customer Number 26813

By:

Mark J. Gebhardt

Reg. No. 35,518

Direct Dial (612) 305-1216

Date

CERTIFICATE UNDER 37 CFR §1.8:

The undersigned hereby certifies that this Transmittal Cover Sheet and the paper(s), as described hereinabove, are being transmitted via the U.S. Patent and Trademark Office electronic filing system in accordance with 37 CFR §1.6(a)(4) to the Patent and Trademark Office addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 23 day of June, 2008.

By:

Sandy Truchart
Sandy Truchart